

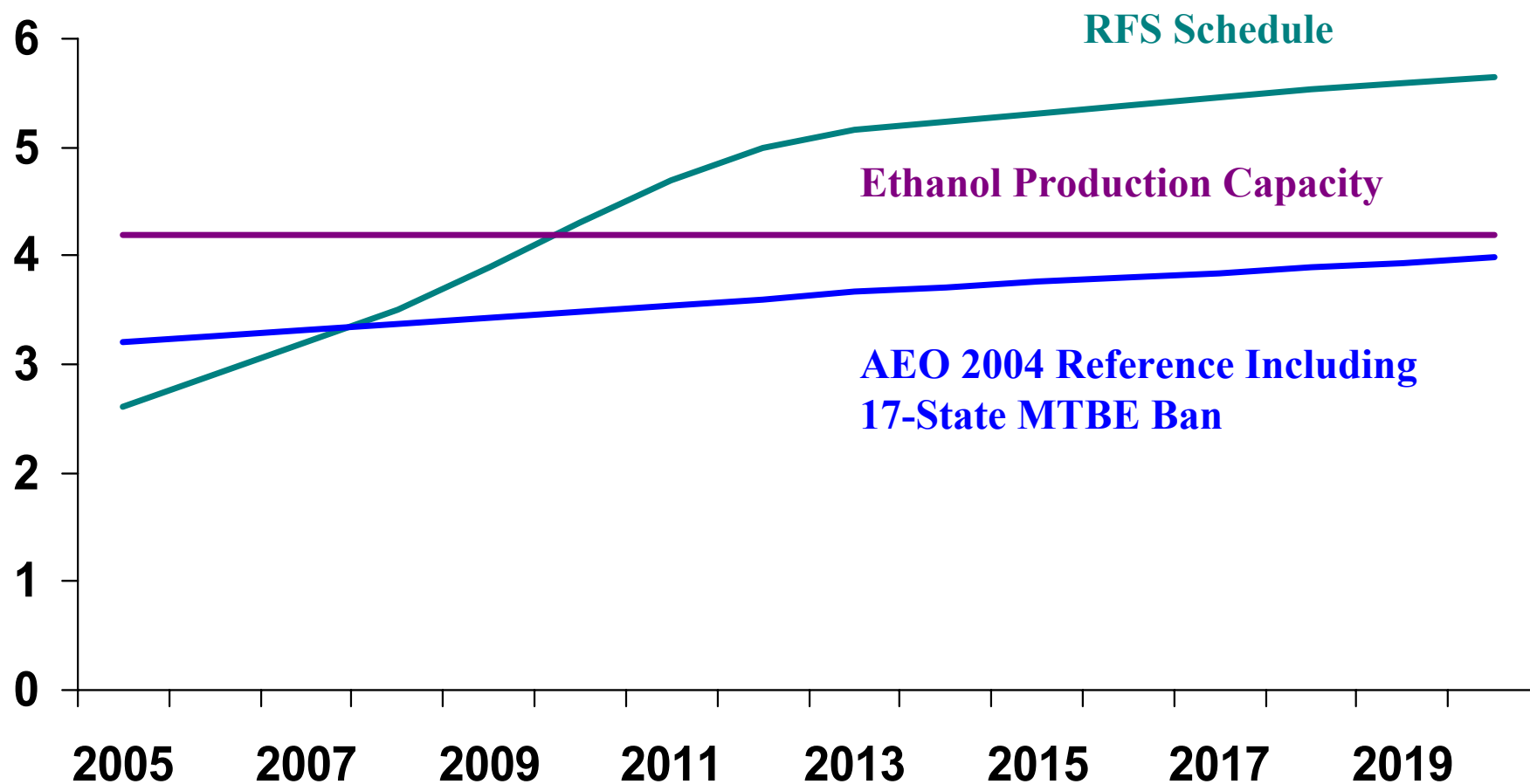
# **EIA's Biofuels Forecast and Methodology**

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# Renewable Fuels Consumption For Transportation, 2003-2020 (billion gallons per year)



# EIA Monthly Oxygenate Telephone Report

Table D1. U.S. Summary, December 2003

Products	December 2003		November 2003		Year-to-Date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
<b>Fuel Ethanol</b>						
Production.....	6,423	207	5,806	194	66,773	183
Stocks .....	5,255	—	5,848	—	—	—
<b>MTBE</b>						
Production.....	3,992	129	4,312	144	61,231	168
Stocks .....	4,281	—	3,914	—	—	—

R = Revised data.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

## Sources for the Price of Corn to Ethanol Producers

- Agriculture's Office of Energy Policy and New Uses has published several studies on the U.S. agricultural economy's response to a renewable motor fuels standard
- The most recent is "Effects on the Farm Economy of a Renewable Fuels Standard for Motor Vehicle Fuel", requested by Senator Harkin and released in August 2002
- Agriculture publishes an economic forecast of the U.S. agricultural economy, "Baseline Projections", every February.

## EIA's Corn Price Forecasts

- Each bushel of corn yields 2.65 gallons of denatured ethanol.
- The Harkin study gives ethanol quantities and corn prices for a baseline and a renewable fuels standard case, used to form a linear rate of change of corn price with respect to ethanol quantity in each forecast year.
- For example, increasing ethanol production by 1 billion gallons adds 15 cents per bushel (2001 cents) in the 2006/2007 marketing year.
- The corn price and ethanol quantity from the latest issue of “Baseline Projections” gives us a point which we use to define a linear relationship between ethanol quantity and corn price in each forecast year.

## Selected Data from the Harkin Study

Marketing Year	Additional corn under RFS, million bushels	Baseline corn price, 2001 \$ per bushel	RFS case corn price, 2001 \$ per bushel
2006/07	26	2.38	2.39
2007/08	98	2.49	2.53
2008/09	189	2.54	2.60
2009/10	290	2.64	2.73
2010/11	391	2.64	2.75
2011/12	464	2.69	2.83

### More Selected Data from the Harkin Study

Marketing Year	Additional soy oil under RFS, million gallons	Baseline oil price, 2001 \$ per gallon	RFS case oil price, 2001 \$ per gallon
2006/07	67.8	1.74	1.87
2007/08	79.8	1.81	1.96
2008/09	91.6	1.86	2.07
2009/10	103.3	1.90	2.15
2010/11	114.7	1.94	2.25
2011/12	125.2	1.98	2.32

## The Relationship Between Soybean Oil Prices and Yellow Grease Prices

- We obtained monthly average prices for yellow grease and soybean oil from 1964 to 2001.
- Since we have forecasts of soybean oil prices but not yellow grease prices, yellow grease prices were regressed on a constant and soybean oil prices.
- *yellow grease price* =  $0.03 + 0.49 * \text{soybean oil price}$ ,  
in 2001 dollars per pound



## Biodiesel Supported by the Commodity Credit Corporation

